

The ASTs contain both liquid and solid waste. The contents have been further subdivided based on analytical results. The listing below categorizes the AST contents:

Barge Waste Water:

AST Volume (gal) Waste Codes

AST2	22,800 Benzene (D018) Chloroform (D022) 1,2-DCA (D028) TCE (D040)
AST13	1,350 Benzene (D018) TCE (D040)
AST15	11,900 Benzene (D018) Chloroform (D022) 1,2-DCA (D028) PCE (D039) TCE (D040)
AST18	3,000 Ignitable < or @80°F
AST19	15,800 Ignitable @140°F Benzene (D018) 1,2-DCA (D028) PCE (D039) TCE (D040)
AST21	55,500 Benzene (D018) Chloroform (D022) 1,2-DCA (D028) TCE (D040)
	Total Volume: 110,350 gallons

Recommendations: These liquids contain concentrations of substances which exceed TCLP

standards but are less than 1% of the total volume of the liquids present. Evaluate disposal options including transport to a permitted waste water treatment facility, incineration or on site treatment.

Chloroform Product AST 1

AST Volume (gal) Waste Codes

AST17 2,300 Chloroform (D022)

Recommendation: Recycle product.

Solid Sludge Waste:

AST Volume (cu yds) Waste Codes

AST13 4.5	Ignitable @100°F Benzene (D018) Carbon Tetrachloride (D019) 1,2-DCA (D028) PCE (D039) TCE (D040) VC (D043)
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Recommendations: Solids contain regulated substances which exceed TCLP standards. Concentrations suggest material may be land ban. Evaluate treatment options including disposal at low temperature thermal desorption treatment plant (kiln), incineration, or disposal at

a hazardous waste landfill.

Please note that a liquid knockout tank is present within the north berm area near AST6. This

tank was not sampled as it is a process vessel and access was restricted. It is possible that this knockout tank contains hazardous liquids. There is potential for additional sludge to be present on the bottom of some of the larger wastewater ASTs which was not sampled.

Wash Water:

AST ID	
AST1	8,400
AST3	187
ASTS	375
AST9	146
AST14*	10,000
AST22	3,400
AST24	8,000
AST25	8,000
Total Volume:	38,508 gal

* Tank contents not fully characterized - should be retested to verify non corrosive result.
Recommendations: Liquids do not contain regulated substances above TCLP standards.
Evaluate disposal options including on site treatment via activated charcoal filtration, or transport to a permitted waste water treatment plant, or deep well injection

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Evaluate disposal options including on site treatment via activated charcoal filtration, or transport to a permitted waste water treatment plant, or deep well injection.

The ASTs are contained within two berm areas at the site. These areas were labeled north berm (sample SW2) and south berm (sample SW4). Analytical results indicate that there are no compounds above TCLP standards in the berm water in either the north or south berm.
Approximate volumes of each berm (based on water levels measured during LTE's March 1999 field program) are listed below:

Berm	Liquid Volume Contained (gal)
SW2	68,860

SW4 57.790 '
Total Volume: 126,650 gal I

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Recommendations: Treatment as stormwater with no obvious sheen. Therefore, after verifying | this type of discharge is permittable with the local authorities, can discharge to surface. As a r best management practice (BMP), LTE suggests running the berm water through a carbon filter prior to discharge, as a final precaution.

3. Drums

Drums have all been moved and staged north of the AST Farm and labeled either with a sample number or with an "E" for empty. Drums with corresponding sample numbers must be treated alike, depending on the analytical results generated by both LTE and ECM & Associates. The following listing categorizes the drums and suggests disposal methods:

Sample ID		# of Drums	Waste Codes
DS2	Soil	13	Benzene (DO 18) Chloroform (D022) 1,2-DCA (D028) PCE(D039)TCE(D040)
DS4	Soil	13	Benzene (DO 18) Chloroform (D022) 1,2-DCA (D028) PCE (D039) TCE (D040)
DS5	Liquid/Soil Mix	3	Benzene (DO 18) 1,2-DCA (D028) TCE (D040)
DS6	Oily Waste**	6	Benzene (DO 18) Carbon Tetrachloride (DO 19)
	Chloroform		(D022) 1,2-DCA (D028) PCE (D039) TCE (D040)
DS7	Soil/Carbon Filters	7	Benzene (DO 18) Carbon Tetrachloride (DO 19)
	Chloroform		(D022) 1,2-DCA (D028) 1,1-DCE (D029) PCE (D039) TCE fD040)

Total* of Drums: 42

** Drums included in DS6 may also contain chlorobenzene, 1,1-DCE, MEK, and/or VC. Sample was diluted to complete analysis.

Recommendations: Drums contain regulated substances which exceed TCLP standards. Concentrations suggest material may be land band. Evaluate disposal options including treatment by low temperature thermal desorption (kiln), incineration or permitted landfill.

Sample IP	# of Drums
DS1	Soil/Iron Flakes 7

DS3	Oily Rags 1
E	Empty -40
	Oil Filters 2
	Respirator Filters 1

Total # of Drums: 51

Recommendations: Disposal at a permitted solid waste landfill.

Sample ID	# of Drums
DS8 Liquids	10

Total # of Drums: 10

Recommendations: Dispose

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DS4 Soil	13	Benzene (DO 18) Chloroform (D022) 1,2-DCA (D028) PCE (D039) TCE (D040)
DS5 Liquid/Soil Mix	3	Benzene (DO 18) 1,2-DCA (D028) TCE (D040)
DS6 Oily Waste**	6	Benzene (DO 18) Carbon Tetrachloride (DO 19)
Chloroform		(D022) 1,2-DCA (D028) PCE (D039) TCE (D040)
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